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Serial Number 10/674,234
Docket Number YOR920030485US1
Amendment1

Amendments to the Specification:

Please replace the abstract with the following amended abstract:

Abstract

A method for determining how a region of a data structure in an application evolves comprises the steps of: periodically traversing selected subgraphs of the region in the running application; ~~location~~ locating structural changes in the subgraphs; using these structural changes to describe, characterize, and identify changes to the region as a whole; and reporting the region changes to an analysis agent. Determining how a region of a data structure evolves is a continuous and adaptive process. The process is made continuous and adaptive through several methods, including: identifying a set of desired updates; adjusting the period in between traversals based on whether the desired updates have been witnessed; and adjusting the frequency of sampling any one traversal based on whether that traversal has detected desired updates. Additionally, the method comprises updating qualitative and quantitative characterizations of the regions under analysis based on structural changes to the regions as whole.

Please replace paragraph [0037] with the following amended paragraph:

[0037] Referring to FIG. 3A, there is shown a block diagram illustrating various objects in a business application. One leak root may encompass multiple regions evolving in different ways (co-evolving regions or CERs). Using the concept of CERs provides a way to identify these distinct regions and concisely model the essence of their evolution. To this purpose, the owner proxy 304 and change proxies 306, waypoints along each member's path from the leak root 302 as used to identify the distinct regions. These waypoints are useful for a number of

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purposes. First, they classify members into CERs, and allow ranking of regions according to whether they leak. The waypoints are also useful for summarizing the structural highlights and severity of each region's growth for the user. A ViewReference 308 is coupled to the change-proxies 306.